

THE COUNCIL FOR TOBACCO RESEARCH--U.S.A., INC.

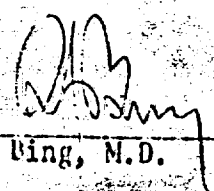
Application of Stephen Vatner

The application by Stephen Vatner deals primarily with establishment of a reflex arc, responsible for the action of the effect of nicotine on the coronary circulation. They have demonstrated this primarily by finding coronary vasodilation in the dog on deep inspiration. This coronary vasodilation occurs without an increase in systemic blood pressure and the afferent and efferent arches of this reflex system can be paralyzed with alpha and beta receptors respectively.

This is a rather sophisticated work and the methods are extremely difficult. For example, all experiments are carried out on completely unanesthetized dogs with implanted Doppler velocity measurements around the coronary arteries and measurements of ventricular volumes by means of sonar. Everything is recorded on tapes.

Unquestionably these workers are very knowledgeable and the whole business of a coronary reflex as induced by nicotine is a fascinating one. I am not so convinced as yet that hemodynamic parameters do not play a role, but even if this should be the case, it represents a most interesting project.

I therefore would recommend that Drs. Vatner and Braunwald be encouraged to submit a regular application to the CTR to be acted upon in March.


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